

10/577775

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IAP17 Rec'd PCT/PTO 28 APR 2006

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|----------------------------------|---|------------------------------|
| In re Patent Application of      | ) |                              |
| Tae-yoon Kim et al.              | ) | Group Art Unit: Unassigned   |
| Application No.: Unassigned      | ) | Examiner: Unassigned         |
| Filed: April 28, 2006            | ) | Confirmation No.: Unassigned |
| For: EC SOD AND CELL TRANSDUCING | ) |                              |
| EC SOD AND USE THEREOF           | ) |                              |

**FIRST INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98. Also enclosed are copies of Form PCT/ISA/237 (Written Opinion of the International Searching Authority) and Form PCT/ISA/210 (International Search Report) in connection with the related International Application.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

**U.S. Patent Documents**

- 1) MEYER, U.S. Patent No. 5,464,614, issued on November 7, 1995.
- 2) MARKLUND et al., U.S. Patent No. 5,366,729, issued on November 22, 1994.

**Non-Patent Literature Documents**

- 1) SASAKI et al., "Effects of a Single Exposure to UVB Radiation on the Activities and Protein Levels of Copper-Zinc and Manganese Superoxide Dismutase in Cultured Human Keratinocytes," *Photochemistry and Photobiology*, 1997, vol. 64, no. 4, pp. 707-713, The American Society for Photobiology, Lawrence, Kansas, U.S.A.
- 2) TAKAHASHI et al., "Copper, zinc-superoxide dismutase protects from ultraviolet B-induced apoptosis of SV40-transformed human keratinocytes: the protection is associated

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with the increased levels of antioxidant enzymes," *Journal of Dermatological Science*, 2000, vol. 23, pp. 21-21, Elsevier Science Ireland, Ltd., Ireland.

3) PARK et al., "9-Polylysine Protein Transduction Domain: Enhanced Penetration Efficiency of Superoxide Dismutase into Mammalian Cells and Skin," *Molecules and Cells*, 2002, vol. 12, no. 2, pp. 202-208, Korean Society for Molecular Biology, Republic of Korea.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since these documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b), no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date April 28, 2006

By: \_\_\_\_\_

  
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Substitute for form 1449A/PTO &amp; 1449B/PTO

# **FIRST INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

Complete if Known

|                        |                      |
|------------------------|----------------------|
| Application Number     | Unassigned 10/577775 |
| Filing Date            | April 28, 2006       |
| First Named Inventor   | Tae-yoon Kim et al.  |
| Examiner Name          | Unassigned           |
| Attorney Docket Number | 1012679-000121       |

## **U.S. PATENT DOCUMENTS**

| Examiner Initials | Document Number | Kind Code (if known) | Name of Patentee or Applicant of Cited Document | Issue/Publication Date (MM-DD-YYYY) |
|-------------------|-----------------|----------------------|---|-------------------------------------|
|                   | 5,366,729       | A                    | MARKLUND et al.                                 | 11-22-1994                          |
|                   | 5,464,614       | A                    | MEYER   | 11-07-1995                          |
|                   |                 |                      |   |                                     |
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## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials | Document Number | Kind Code (if known) | Country | Date of Publication (MM-DD-YYYY) | STATUS      |                     |                    |               |      |          |               |
|-------------------|-----------------|----------------------|---------|----------------------------------|-------------|---------------------|--------------------|---------------|------|----------|---------------|
|                   |                 |                      |         |                                  | Translation | Partial Translation | Eng. Lang. Summary | Search Report | IPER | Abstract | Cited in Spec |
|                   |                 |                      |         |                                  |             |                     |                    |               |      |          |               |
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|                   |                 |                      |         |                                  |             |                     |                    |               |      |          |               |

## **NON-PATENT LITERATURE DOCUMENTS**

| Examiner Initials | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.   |
|-------------------|---|
|                   | SASAKI et al., "Effects of a Single Exposure to UVB Radiation on the Activities and Protein Levels of Copper-Zinc and Manganese Superoxide Dismutase in Cultured Human Keratinocytes," <i>Photochemistry and Photobiology</i> , 1997, vol. 64, no. 4, pp. 707-713, The American Society for Photobiology, Lawrence, Kansas, U.S.A.        |
|                   | TAKAHASHI et al., "Copper, zinc-superoxide dismutase protects from ultraviolet B-induced apoptosis of SV40-transformed human keratinocytes: the protection is associated with the increased levels of antioxidant enzymes," <i>Journal of Dermatological Science</i> , 2000, vol. 23, pp. 21-21, Elsevier Science Ireland, Ltd., Ireland. |
|                   | PARK et al., "9-Polylysine Protein Transduction Domain: Enhanced Penetration Efficiency of Superoxide Dismutase into Mammalian Cells and Skin," <i>Molecules and Cells</i> , 2002, vol. 12, no. 2, pp. 202-208, Korean Society for Molecular Biology, Republic of Korea.  |
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|--------------------|-----------------|
| Examiner Signature | Date Considered |
|--------------------|-----------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.